Work Orde		918		*959				Page 1				
Revision ID:	D2282-041		,	Accept	*N900	040	100)*	Setup	Start Stop	*N: *N:	S1*
	T Assembly 1/16/13 1/24/13	Start Qty: 4.00 Req'd Qty: 4.00	*4 *4		Cust Item l Customer:	D:				_	·······································	
Approvals:	Process Pla	nn: ML5		Tooling:	D	ate:			Run	Start	17	R1*
	QC:		Date:	SPC (Y/N):	D	ate:				Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt	ject y	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr				,						
D2282	Rev	E										13-
100° *100* Large Fab		Large Fab		0.00				4				·
Large Fab		Grind cha	sh weld right after v									
110		QC9- Inspect visual per	QSI004- Fusion We	elds 0.00								DA
110 QC Quality Control		Memo		0.00				<u> </u>)	13-0	9-9 <i>0</i>	\ <u>0</u> 9
120				0.00						_	_	

0.00

Small Fab

120 Small Fab

Small Fab

Memo

Tumble

4 76 13220

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	
1100		3 34 10

_		-		
\cap	4 C.	100	へん	•
. ,,	.	ほりつ	-()	

Date:

										-	QA Closed.	Date.			
Work Orde	er:					DISPOSITION		AGAINST DEPARTMENT/PROCESS							
						Rework			Skid-tube	Crosstube	7	Water Jet	Engineering		
Part N	۱o.					Scrap			Nachining	Small Fab	Pro	d. Eng. Coor.	Quality		
						Use-as-is		~ <u>~</u>		Finishing	Rec/Store/Packaging		Other		
NCR No.						Work Order Update				Composite	1	Supplier			
Root					Descri	ption of work order update		Initial Action		ction	Sign &				
Cause		Date	Step	Qty	(or Non-conformance	Chief	f Eng	Desc	cription	Date	Verification	QC'Inspector		
Doc/Data		Ī													
Equip/Tooling												l.			
Operator								-							
Material [- 1							
Setup															
Other	,														
Process															
Supplier								1							
Training		ľ									į				
Unapproved															
						F.A	AULT (CATE	ORY						
Landir	ng Gea	er .				General									
	Be	ending				Bend	Gı	rain		[Ovalized		Pressure/Forced		
	Ce	entre No	t Concer	ntric to (o/s	BOM/Route	Ha	ardwar	·e		Over/Under	tolerance	Temperature/Cure		
, [Cr	acks				Broken/Damaged	In:	spectio	on Incomplete		Part Incorre	ct	Weld		
	Cr	ushed/C	rimped,			Burrs	ln:	structi	ons Incomplete,	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled		
ſ	Cu	ıffs				Contamination	□м	lainte	nance	Γ	Part Moved	_	_		
ſ	Не	eat Treat	ţ			Countersink	Пм	islabel	ed		Positioned V	Vrong			
[Ins	spection	Strip in	Tube		Cut Too Short	∏м	isread			Power Loss/	Surge	Other		
	Rig	pples in	Bend			Drill Holes	O1	ffset		_	_				
	То	rque Wa	aves in E	xtrusio	n [Drawing	o	ut of C	alibration						
Turning Sequence			Finish	O	ut of S	equence									
Wave/Twist in Tube			Folio	O	Outside Dimensions										

Work Order ID 95918 *95918* Page 2 January-21-13 9:51:01 AM Item ID: D2282-041 Accept *N900040100* Setup Start Revision ID: Item Name: T Assembly *//* Start Oty: 4.00 **Start Date:** 1/16/13 Cust Item ID: Required Date: 1/24/13 Rea'd Otv: 4.00 Customer: Reference: Run Approvals: Process Plan: Date: Tooling: Date: Stop SPC (Y/N): Date: Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. Work Center ID **Description** Code Qty Qty Number Stamp **Run Hours** 130 OC5- Inspect part completeness to step on W/O *130* 16 13/2/10 OC. Memo **Ouality Control** 140 Identify as per dwg & Stock Location: 0.00 . *1//0* GA 0.00 Packaging Memo Packaging

0.00

0.00

OC21- Final Inspection - Work Order Release

Memo

150

QC

150

Quality Control

MC3 13-02-2d

												DQA:	D	ate:	
NCR:	Yes	/ No				WORK ORDER NON-	100	NFOR	MANCE / UP	DATE					
												QA Closed:	D	ate:	
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS							
WOIK OIG	CI.					Rework		Skid-tube Crosstube			1	Water Je	t□	Engineering	
Part No.				Scrap		Machining Small Fab			Prod. Eng. Coor.			Quality			
			1			· H 1			noforming	Finishing		4	e/Packagin	\vdash	Other
NCR	No.					Work Order Update			Large Fab	Composite			Supplie	r	
		1	ī	1	I -								- · · · · · · · · · · · · · · · · · · ·		. :
Root					l.	iption of work order update	1	Initial		tion		Sign &			
Cause	T	Date	Step	Qty	<u> </u>	or Non-conformance	Ch	nief Eng	ng Description			Date	Verificati	on	QC Inspector
Doc/Data	<u> </u>														
Equip/Tooling															
Operator															
Material	<u></u>								-						
Setup								* , -							
Other								37							
Process				1											
Supplier															
Training]													
Unapproved	Г														
			,			F	ΑUI	LT CATE	GORY						
Land	ing (Gear				General									
		Bending				Bend	Г	Grain			Γ	Ovalized			Pressure/Forced
	Г	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Γ	Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspection Incomplete			Г	Part Incorre	ct		Weld
	Crushed/Crimped.				Burrs		- 1	iors Incomplete/	/Unclear	Г	Part Lost/Mi	issing		Wrong Stock Pulled	
	Cuffs					Contamination			•		П	Part Moved	•	_	

Mislabeled

Out of Calibration

Outside Dimensions

Out of Sequence

Misread

Offset

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

January-21-13 9:51:01 AM

Work Order ID:

95918

Parent Item:

D2282-041

Parent Item Name:

T Assembly

Start Date: 1/16/13

Required Date: 1/24/13

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2282-3	·	Manufactured	No			100	Each	14.0000	1	4			12-02-2
Γube													13 -20
				Location		Loc Qty	Lo	c Code					18,
				193	821	6 §			1	<u> </u>			
				749	69	11			۱				
				919	31]	[3				<u> </u>			
02282-5		Manufactured	No		,	100	Each	112.0000	1	4			15-02
Tube										· · · · · · · · · · · · · · · · · · ·			15-02
				Location		Loc Oty	<u>Lo</u>	oc Code					
				WA001		11							
				749	162	11							
				WA002	1876 man	101			1	-			
				918	350	41			(1			
				920	93	60							

											DQA:	Date	:
NCR:	Yes /	No				WORK ORDER NON-C	100	NFORM	MANCE / UPDATE			_	
											QA Closed:	Date	2:
Work Orde	or.					DISPOSITION							
Part No						Rework Scrap Use-as-is Work Order Update			Skid-tube Crosstube Small Fab Thermoforming Finishing Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	ı	nitial	Action		Sign &		
Cause	D	ate	Step	Qty	(or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator			i										
Material													
Setup				:									
Other													
Process		ĺ											
Supplier													
Training													
Unapproved		1											
-						F	AUL	T CATE	GORY		·		
Landi	ng Gear					General		_			_		
	Ben	ding				Bend		Grain			Ovalized		Pressure/Forced
	Cen	tre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cra	cks				Broken/Damaged	Г	Inspecti	on Incomplete	Г	Part Incorre	ct · [Weld
	Cru	shed/C	rimped.			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	issing	Wrong Stock Pulled
	Cuf	fs				Contamination		Mainte	nance		Part Moved	_	_
	Hea	t Treat	:			Countersink		 			Positioned V	Vrong	
	Insp	ection	Strip in	Tube		Cut Too Short				Power Loss/	Surge	Other	
	Ripples in Bend				Drill Holes		Offset			_	-		

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

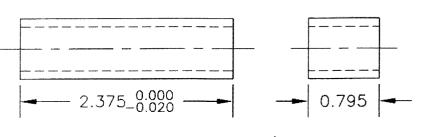
Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



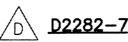
	DESIG	и BW	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
	CHECK	(ED)	APPROVED	DRAWING NO. REV. E D2282 SHEET 1 OF 2
1	DATE			TITLE SCALE
	05.0	06.07		HANDLE TUBES 1:1
	Α		94.10.14	NEW ISSUE
	В		95.03.23	RE-DESIGN
	С		97.10.20	CORRECTED NUMBERING SCHEME
	D		05.03.16	REDESIGN D2282-5; 0.795 WAS 0.750
	Ε		05.06.07	D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030



Ø0.675 (REF) Ø0.493 (REF)

Ø0.700

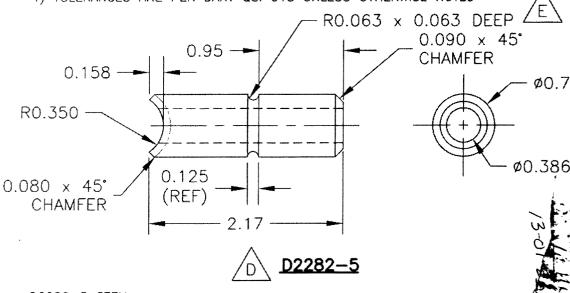
D2282-3



D2282-3/-7 TUBE:

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES

4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2282-5 STEM:

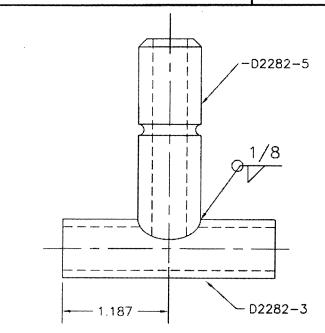
- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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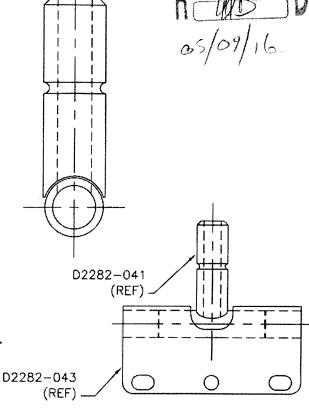
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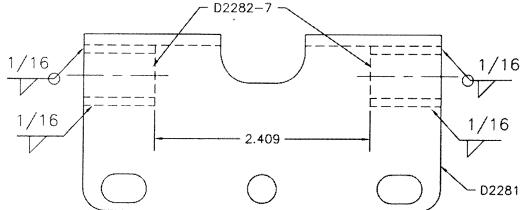
DESIGN BW	DRAWN BY	DART AEROS HAWKESBURY, ONT	
CHECKED	APPROVED	DRAWING NO.	REV. E
u'	1 UND	D2282	SHEET 2 OF 2
DATE	~~~ (:)	TITLE	SCALE
05.06.07		HANDLE TUBES	1:1



D2282-041 'T' ASSEMBLY WELD ASSEMBLY PER DART QSI 004



GENERAL ASSEMBLY SCALE 1:2



D2282-043 SADDLE ASSEMBLY WELD ASSEMBLY PER DART QSI 004

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